

WHAT IS CLAIMED IS:

1. A method for separating or eliminating killer lymphocytes, which comprises allowing an antibody directed to CX3CR1 to bind to lymphocytes and separating the lymphocytes by FACS or MACS using the binding of the antibody as an index.

2. A reagent for separating or eliminating killer lymphocytes used for the method as defined in Claim 1, which comprises an antibody directed to CX3CR1 and a carrier.

3. A method for identifying killer lymphocytes, which comprises labeling lymphocytes with an antibody directed to CX3CR1 and identifying the killer lymphocytes by FACS based on the label.

4. A reagent for identifying killer lymphocytes used for the method as defined in Claim 3, which comprises an antibody directed to CX3CR1 and a carrier.

5. A method for identifying killer lymphocytes, which comprises immunohistostaining lymphocytes by using an antibody directed to CX3CR1.

6. A reagent for identifying killer lymphocytes used for the method as defined in Claim 5, which comprises an antibody directed to CX3CR1 and a carrier.

7. A therapeutic agent for an autoimmune disease, which comprises an antibody that binds to CX3CR1 or fractalkine and inhibits chemotaxis of killer lymphocytes by suppressing an interaction between CX3CR1 and fractalkine, and a pharmaceutically acceptable carrier.

8. The therapeutic agent for an autoimmune disease according to Claim 7, wherein the antibody binds to fractalkine.

9. A method for treating an autoimmune disease, which comprises administering a therapeutically effective amount of an antibody that binds to CX3CR1 or fractalkine and inhibits chemotaxis of killer lymphocytes by suppressing an interaction between CX3CR1 and fractalkine.

10. The method for treating an autoimmune disease according to Claim 9, wherein the antibody binds to fractalkine.

11. A method for treating an autoimmune disease, which comprises inhibiting chemotaxis of killer lymphocytes by suppressing an interaction between CX3CR1 and fractalkine.

12. An immunotoxin comprising an antibody directed to CX3CR1 and a cytotoxic substance bound to the antibody.

13. A method for treating cancer, which comprises introducing a gene coding for fractalkine into a cancer cell so that fractalkine is expressed in an amount sufficient for causing migration of killer lymphocytes.

14. An agent for gene therapy of cancer, which comprises a gene coding for fractalkine and a pharmaceutically acceptable carrier.